

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX040919\  
 Data File : VX008775.D  
 Acq On : 09 Apr 2019 16:59  
 Operator : JC/SP  
 Sample : K2338-05  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Apr 10 06:38:19 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X040319W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Apr 04 04:47:41 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 206902   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 346559   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 295233   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 122171   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |       |     |          |       |        |      |
|---------------------------|-------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06  | 65  | 143095   | 47.42 | ug/l   | 0.00 |
| Spiked Amount             |       |     |          |       |        |      |
|                           |       |     | Recovery | =     | 94.84% |      |
| 35) Dibromofluoromethane  | 5.50  | 113 | 104289   | 47.07 | ug/l   | 0.00 |
| Spiked Amount             |       |     |          |       |        |      |
|                           |       |     | Recovery | =     | 94.14% |      |
| 50) Toluene-d8            | 8.71  | 98  | 428455   | 48.56 | ug/l   | 0.00 |
| Spiked Amount             |       |     |          |       |        |      |
|                           |       |     | Recovery | =     | 97.12% |      |
| 62) 4-Bromofluorobenzene  | 11.13 | 95  | 139990   | 44.74 | ug/l   | 0.00 |
| Spiked Amount             |       |     |          |       |        |      |
|                           |       |     | Recovery | =     | 89.48% |      |

## Target Compounds

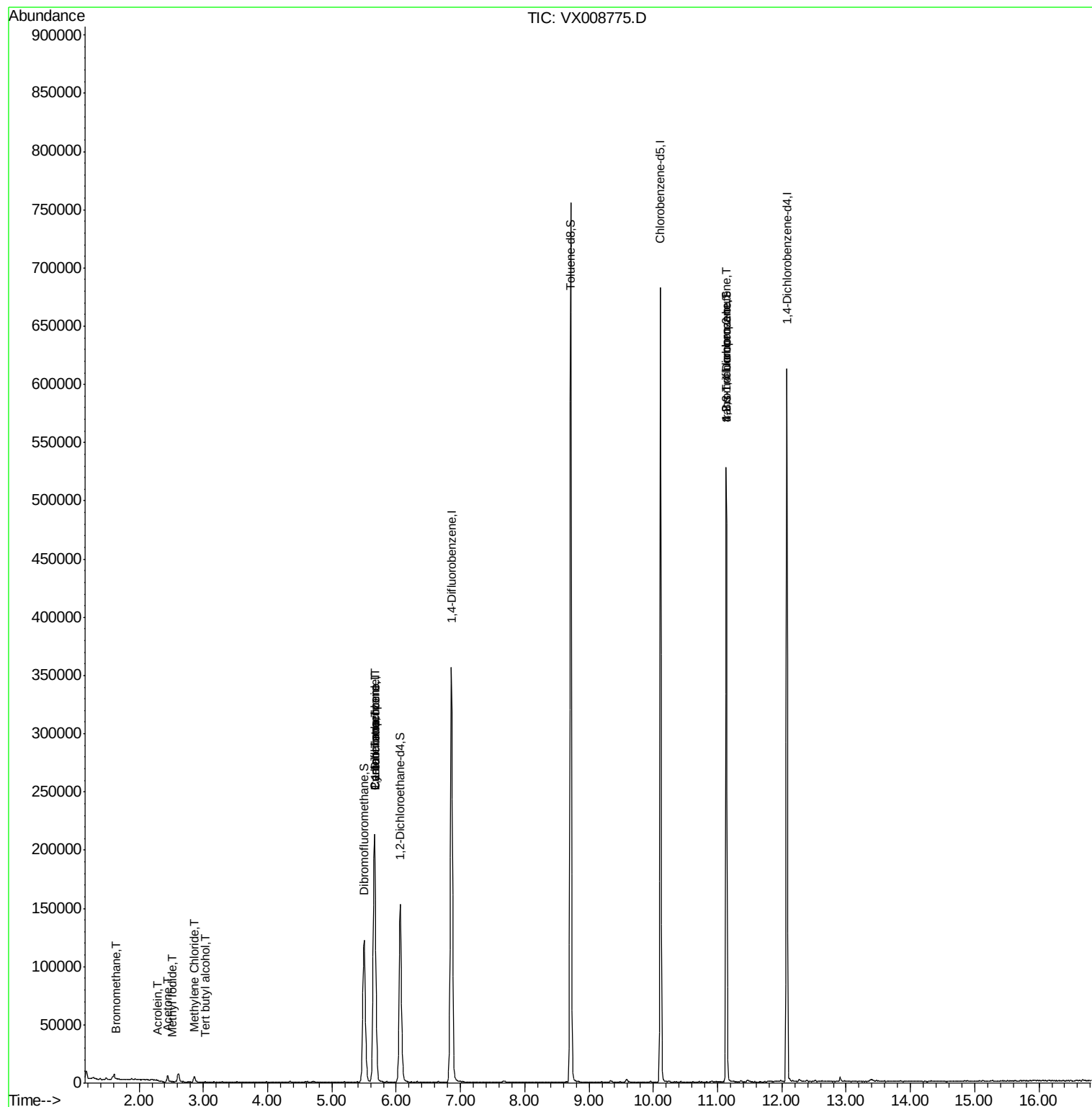
|                                |       |     |       |           | Qvalue    |
|--------------------------------|-------|-----|-------|-----------|-----------|
| 3) Chloromethane               | 1.32  | 50  | 277   | Below Cal | # 64      |
| 5) Bromomethane                | 1.64  | 94  | 149   | 1.976     | ug/l 95   |
| 6) Chloroethane                | 1.71  | 64  | 101   | Below Cal | # 43      |
| 10) Methyl Iodide              | 2.52  | 142 | 157   | 4.072     | ug/l # 52 |
| 11) Tert butyl alcohol         | 3.04  | 59  | 271   | 0.384     | ug/l # 72 |
| 13) Acrolein                   | 2.29  | 56  | 201   | 0.574     | ug/l # 13 |
| 16) Acetone                    | 2.44  | 43  | 5953  | 3.425     | ug/l 97   |
| 17) Carbon Disulfide           | 2.57  | 76  | 639   | Below Cal | # 39      |
| 20) Methylene Chloride         | 2.85  | 84  | 2022  | 0.695     | ug/l # 89 |
| 28) Bromochloromethane         | 5.03  | 49  | 26    | Below Cal | # 22      |
| 31) Cyclohexane                | 5.67  | 56  | 4737  | 0.909     | ug/l # 1  |
| 36) 1,1-Dichloropropene        | 5.67  | 75  | 16653 | 4.396     | ug/l # 51 |
| 38) Carbon Tetrachloride       | 5.67  | 117 | 20142 | 6.424     | ug/l # 16 |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75  | 71390 | 21.271    | ug/l # 34 |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75  | 71390 | 58.636    | ug/l # 9  |

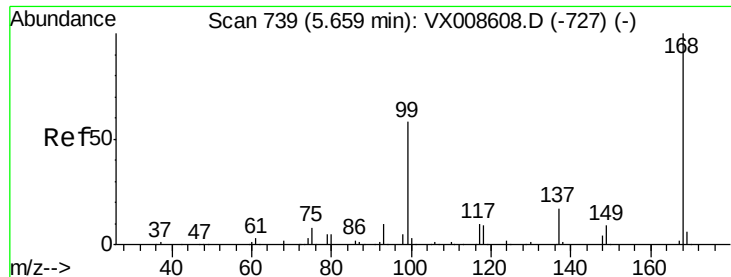
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX040919\  
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ALS Vial : 17 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :

Quant Time: Apr 10 06:38:19 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X040319W.M  
Quant Title : SW846 8260  
QLast Update : Thu Apr 04 04:47:41 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.01 min

Lab File: VX008775.D

Acq: 09 Apr 2019 16:59

Instrument :

MSVOA\_X

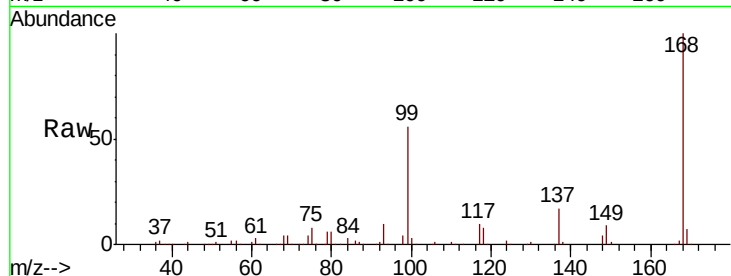
ClientSampleId :

Tot Ion:168 Resp: 206902

Ion Ratio Lower Upper

168 100

99 55.8 46.7 70.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

80000

60000

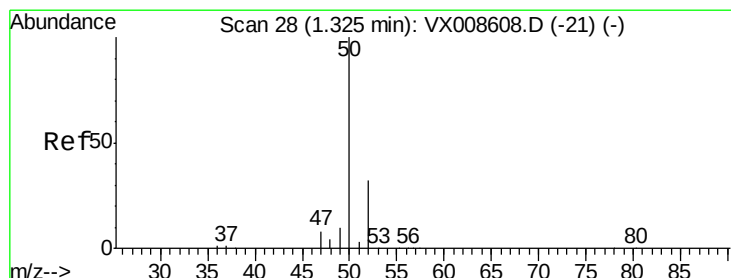
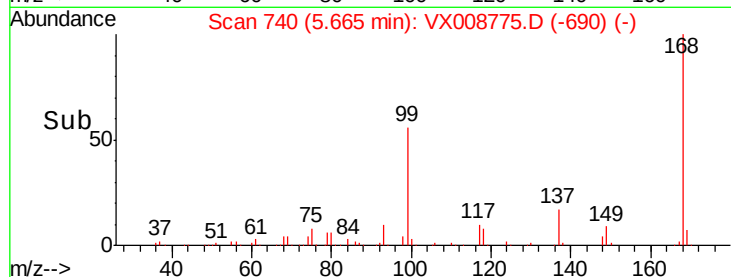
40000

20000

0

Time-->

5.50 5.60 5.70 5.80



#3

Chloromethane

Concen: Below Cal

RT: 1.32 min Scan# 28

Delta R.T. 0.00 min

Lab File: VX008775.D

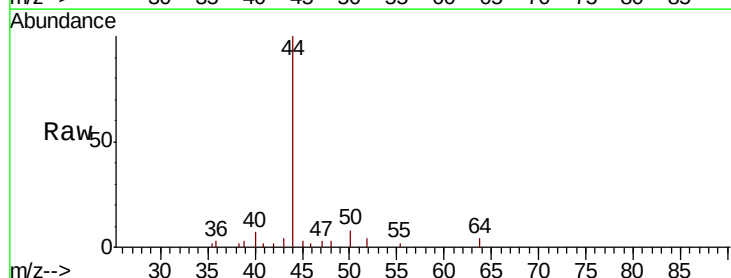
Acq: 09 Apr 2019 16:59

Tgt Ion: 50 Resp: 277

Ion Ratio Lower Upper

50 100

52 52.5 25.8 38.8#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.32

200

150

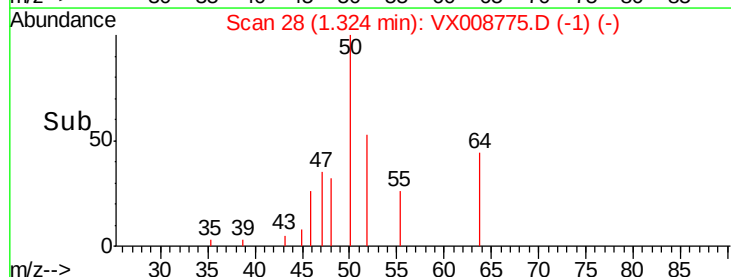
100

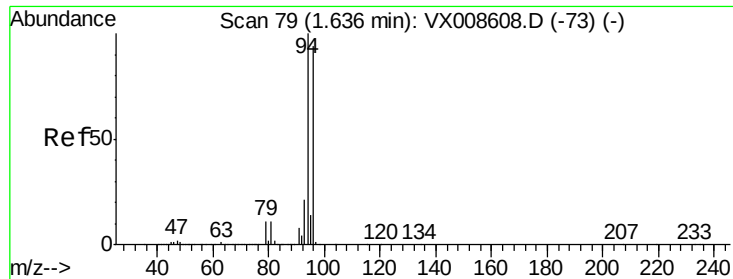
50

0

Time-->

1.30 1.32 1.34 1.36





#5

Bromomethane

Concen: 1.976 ug/l

RT: 1.64 min Scan# 80

Delta R.T. 0.01 min

Lab File: VX008775.D

Acq: 09 Apr 2019 16:59

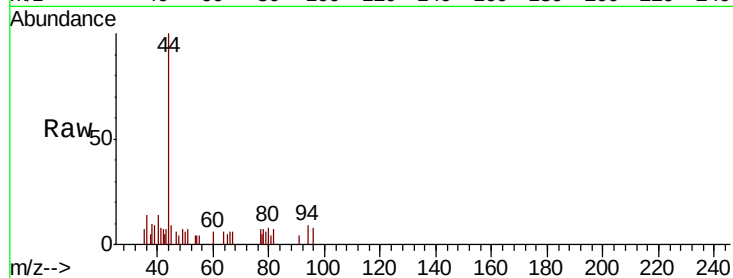
Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion: 94 Resp: 149

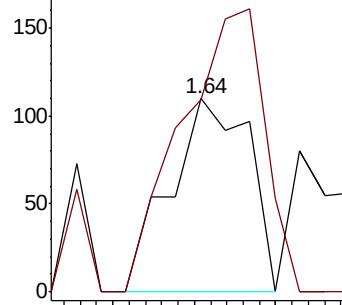
Ion Ratio Lower Upper

94 100

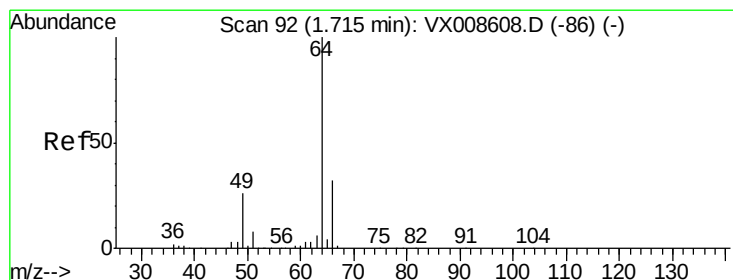
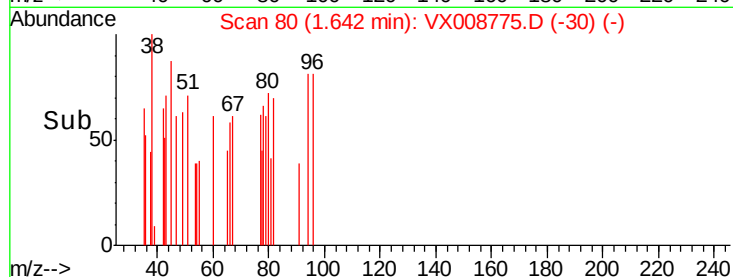
96 99.1 75.2 112.8



Abundance Ion 93.90 (93.60 to 94.60): VX0  
Ion 95.90 (95.60 to 96.60): VX0



Time-->



#6

Chloroethane

Concen: Below Cal

RT: 1.71 min Scan# 91

Delta R.T. -0.01 min

Lab File: VX008775.D

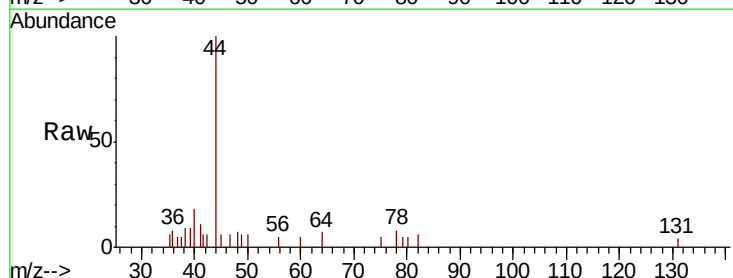
Acq: 09 Apr 2019 16:59

Tgt Ion: 64 Resp: 101

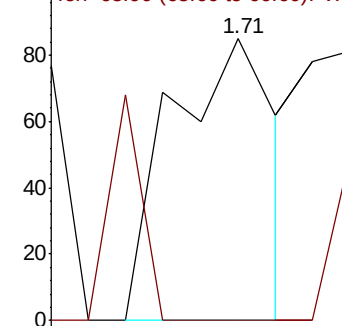
Ion Ratio Lower Upper

64 100

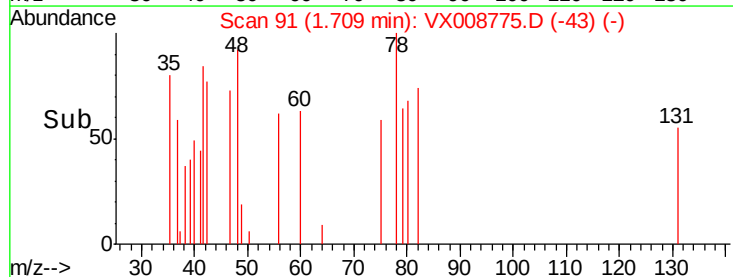
66 0.0 25.4 38.0#

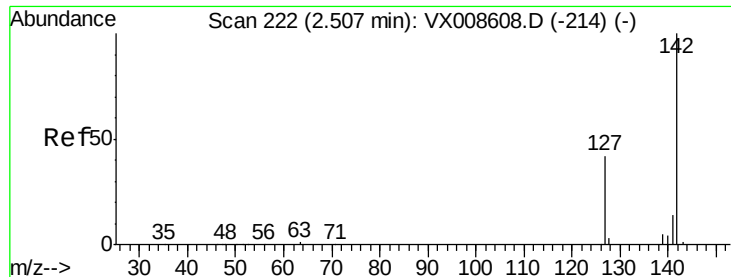


Abundance Ion 63.90 (63.60 to 64.60): VX0  
Ion 65.90 (65.60 to 66.60): VX0



Time-->

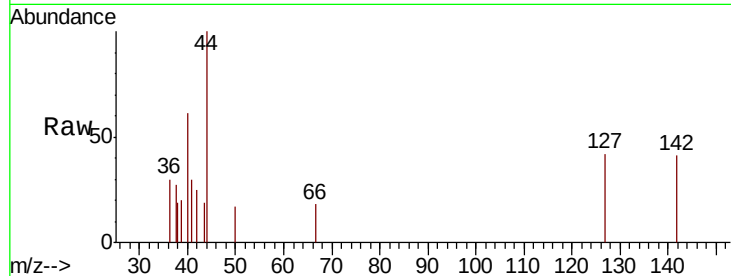




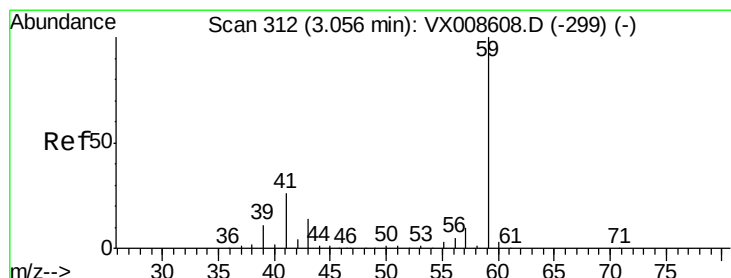
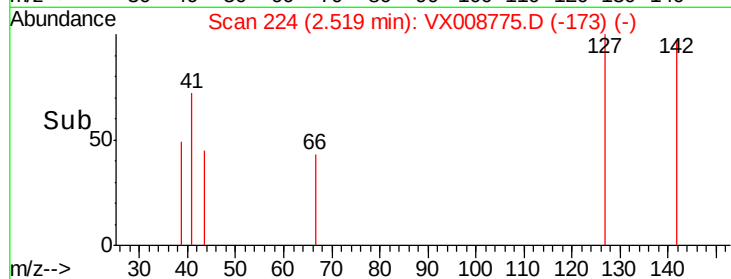
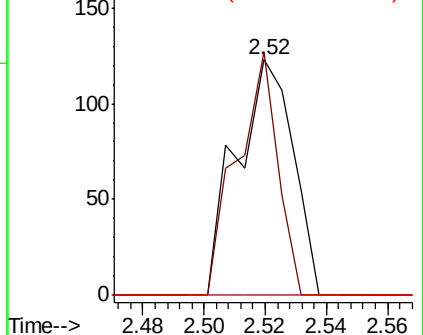
#10  
Methvl Iodide  
Concen: 4.072 ug/l  
RT: 2.52 min Scan# 224  
Delta R.T. 0.01 min  
Lab File: VX008775.D  
Acq: 09 Apr 2019 16:59

Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion:142 Resp: 157  
Ion Ratio Lower Upper  
142 100  
127 73.9 33.0 49.6#  
141 0.0 11.4 17.2#

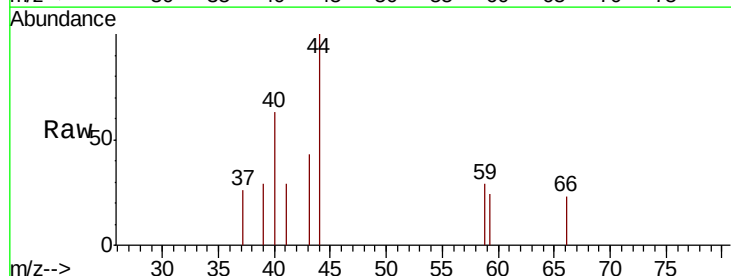


Abundance Ion 141.80 (141.50 to 142.50): V  
Ion 126.80 (126.50 to 127.50): V  
Ion 140.80 (140.50 to 141.50): V

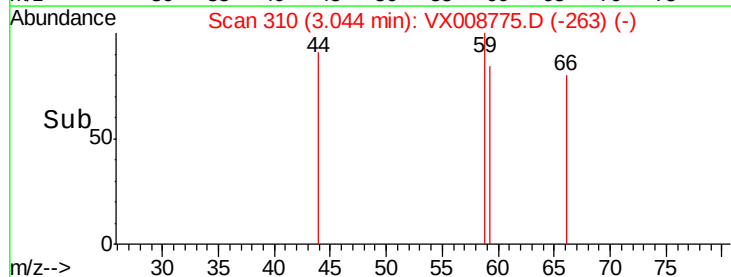
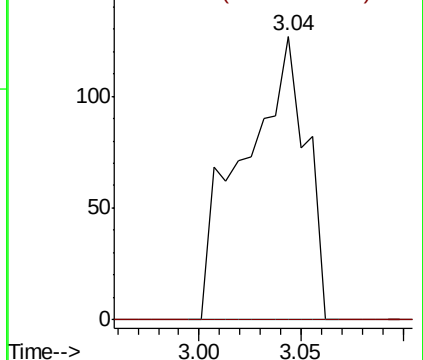


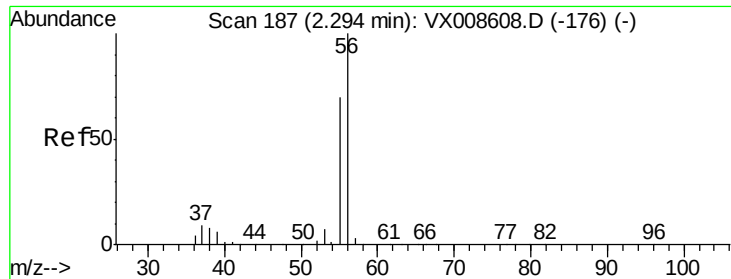
#11  
Tert butyl alcohol  
Concen: 0.384 ug/l  
RT: 3.04 min Scan# 310  
Delta R.T. -0.01 min  
Lab File: VX008775.D  
Acq: 09 Apr 2019 16:59

Tgt Ion: 59 Resp: 271  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.3 12.5#



Abundance Ion 59.00 (58.70 to 59.70): VX0  
Ion 57.00 (56.70 to 57.70): VX0

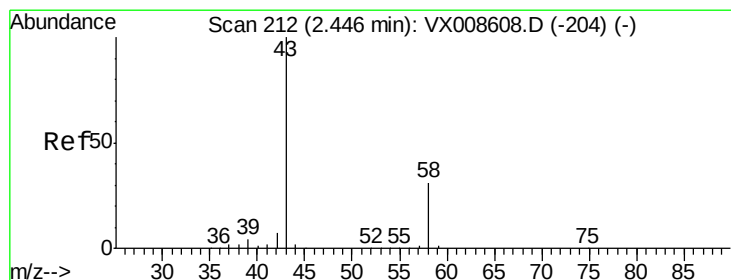
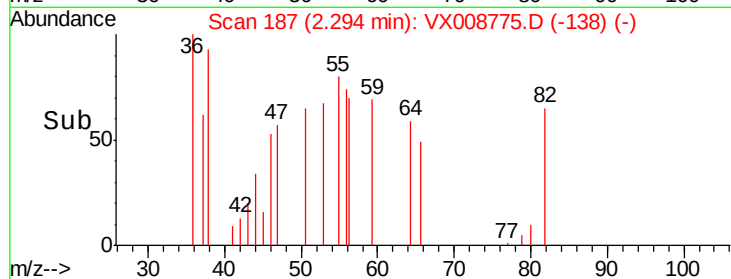
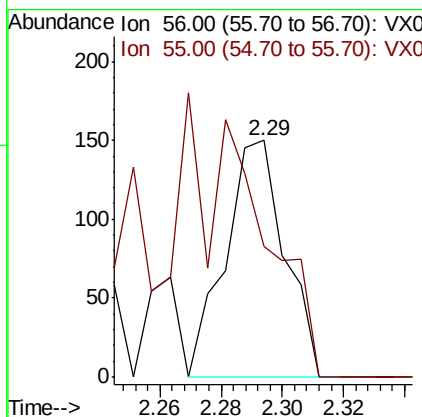
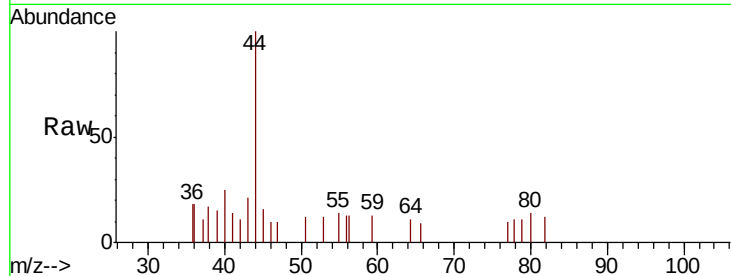




#13  
Acrolein  
Concen: 0.574 ug/l  
RT: 2.29 min Scan# 187  
Delta R.T. -0.00 min  
Lab File: VX008775.D  
Acq: 09 Apr 2019 16:59

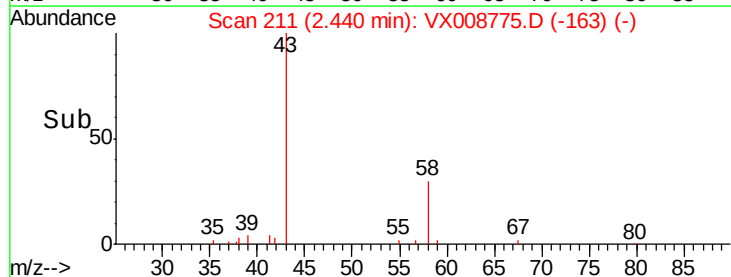
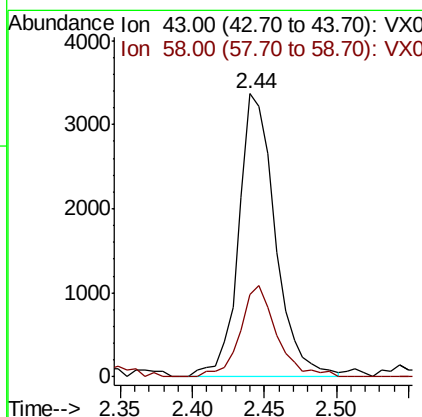
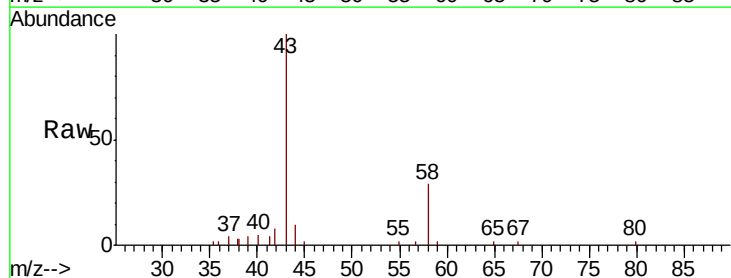
Instrument :  
MSVOA\_X  
ClientSampleId :

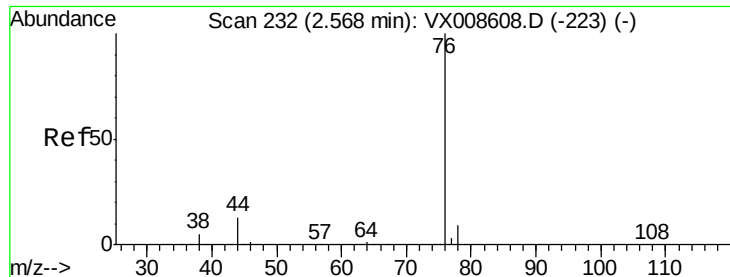
Tot Ion: 56 Resp: 201  
Ion Ratio Lower Upper  
56 100  
55 0.0 58.0 87.0#



#16  
Acetone  
Concen: 3.425 ug/l  
RT: 2.44 min Scan# 211  
Delta R.T. -0.01 min  
Lab File: VX008775.D  
Acq: 09 Apr 2019 16:59

Tgt Ion: 43 Resp: 5953  
Ion Ratio Lower Upper  
43 100  
58 29.3 24.8 37.2





#17

Carbon Disulfide

Concen: Below Cal

RT: 2.57 min Scan# 233

Delta R.T. 0.01 min

Lab File: VX008775.D

Acq: 09 Apr 2019 16:59

Instrument :

MSVOA\_X

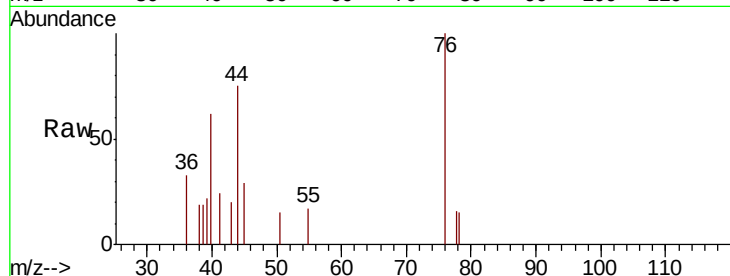
ClientSampleId :

Tot Ion: 76 Resp: 639

Ion Ratio Lower Upper

76 100

78 30.9 7.1 10.7#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0

2.57

300

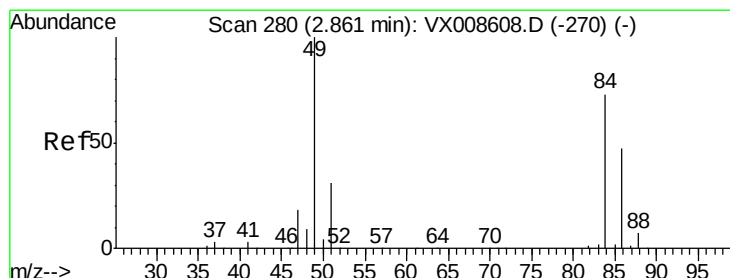
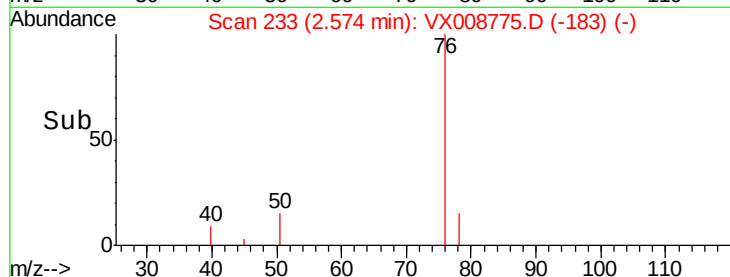
200

100

0

2.50 2.55 2.60

Time-->



#20

Methylene Chloride

Concen: 0.695 ug/l

RT: 2.85 min Scan# 279

Delta R.T. -0.01 min

Lab File: VX008775.D

Acq: 09 Apr 2019 16:59

Tgt Ion: 84 Resp: 2022

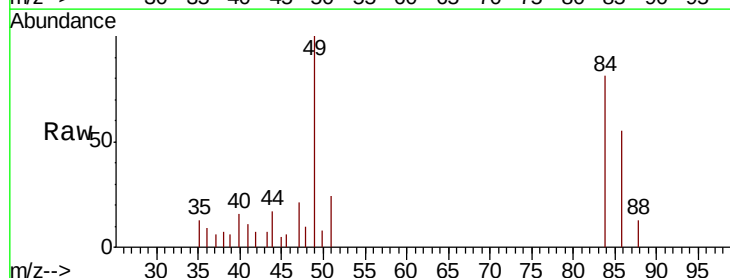
Ion Ratio Lower Upper

84 100

49 122.9 109.7 164.5

51 29.6 33.6 50.4#

86 68.2 51.4 77.2



Abundance Ion 83.90 (83.60 to 84.60): VX0

Ion 48.90 (48.60 to 49.60): VX0

Ion 50.90 (50.60 to 51.60): VX0

Ion 85.90 (85.60 to 86.60): VX0

2000

1500

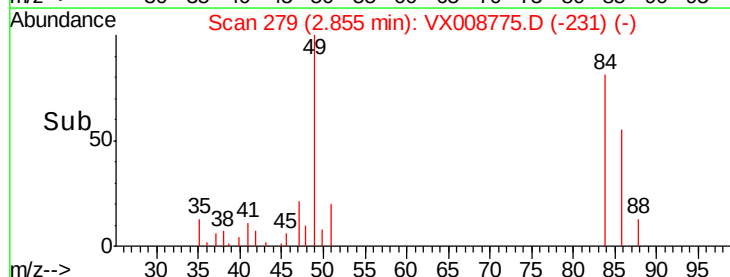
1000

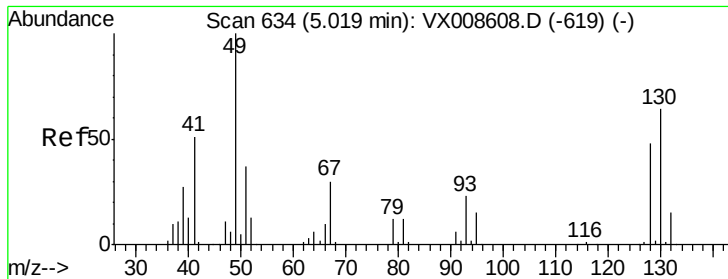
500

0

2.80 2.85 2.90 2.95

Time-->



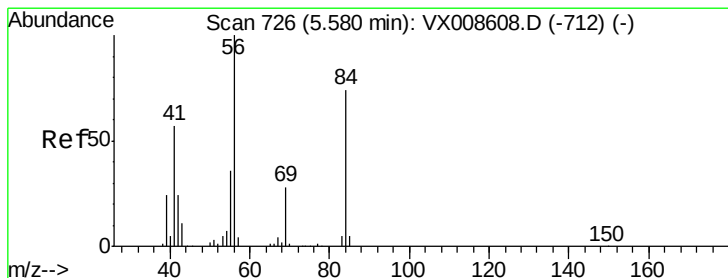
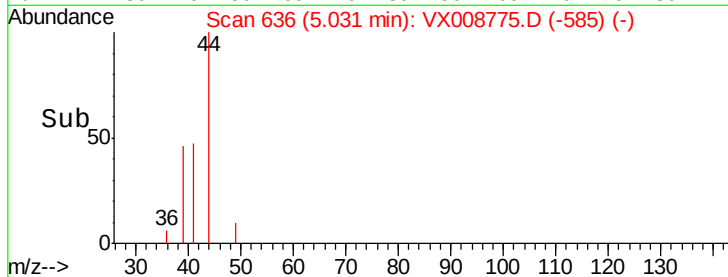
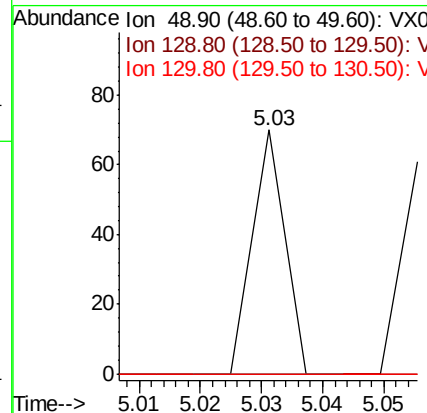
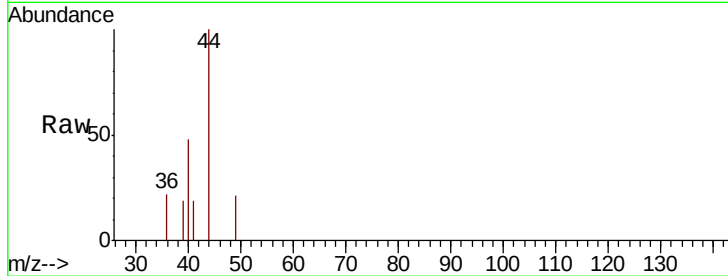


#28

Bromochloromethane  
 Concen: Below Cal  
 RT: 5.03 min Scan# 636  
 Delta R.T. 0.01 min  
 Lab File: VX008775.D  
 Acq: 09 Apr 2019 16:59

Instrument :  
 MSVOA\_X  
 ClientSampleId :

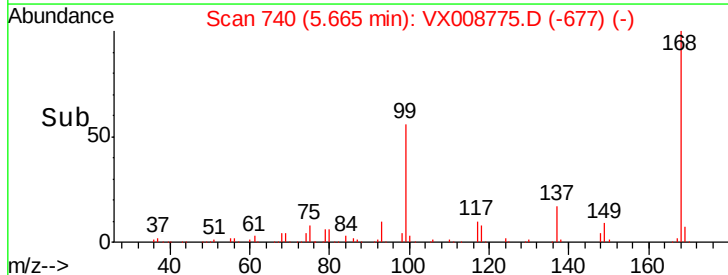
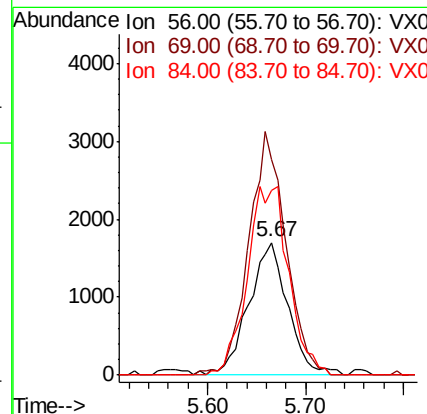
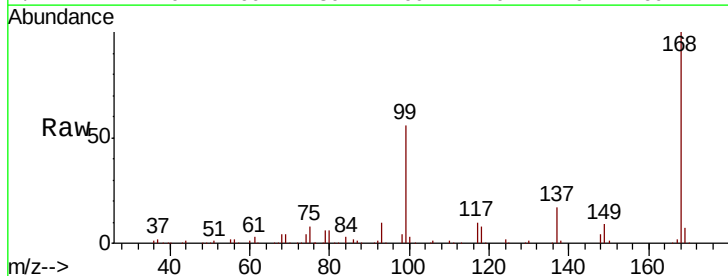
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 49      | 100   |       |       |
| 129     | 0.0   | 0.0   | 3.6   |
| 130     | 0.0   | 49.3  | 73.9# |



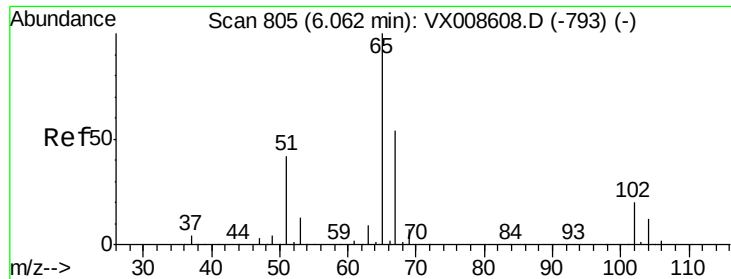
#31

Cyclohexane  
 Concen: 0.909 ug/l  
 RT: 5.67 min Scan# 740  
 Delta R.T. 0.09 min  
 Lab File: VX008775.D  
 Acq: 09 Apr 2019 16:59

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 56      | 100   |       |       |
| 69      | 162.3 | 22.6  | 33.8# |
| 84      | 139.1 | 59.3  | 88.9# |



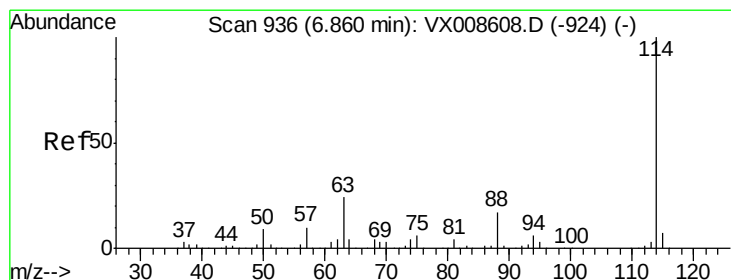
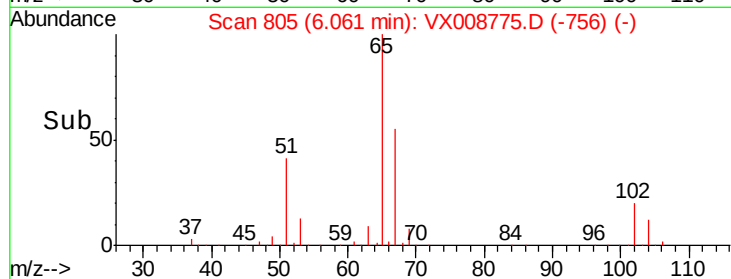
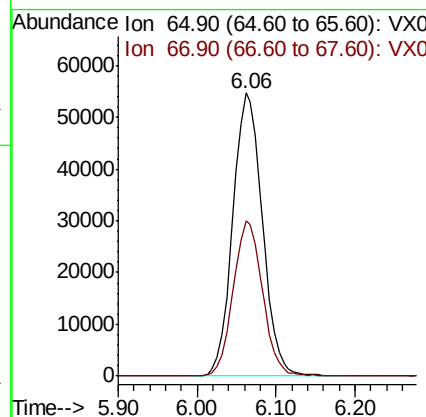
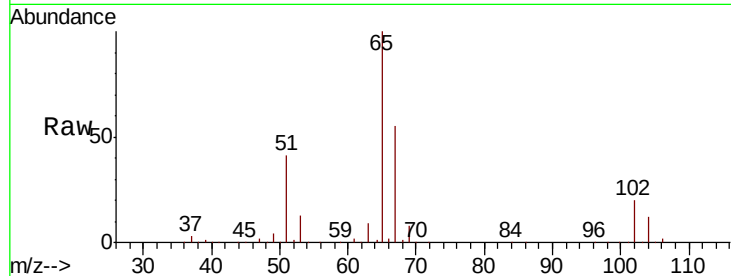




#33  
 1,2-Dichloroethane-d4  
 Concen: 47.417 ug/l  
 RT: 6.06 min Scan# 805  
 Delta R.T. -0.00 min  
 Lab File: VX008775.D  
 Acq: 09 Apr 2019 16:59

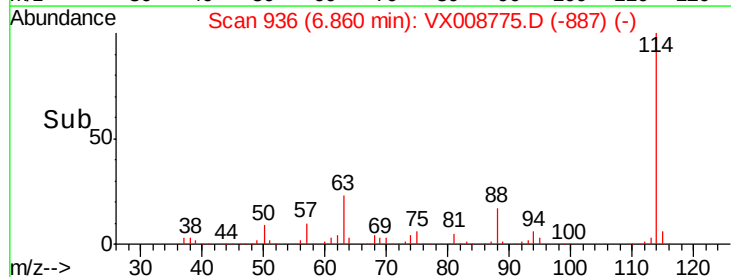
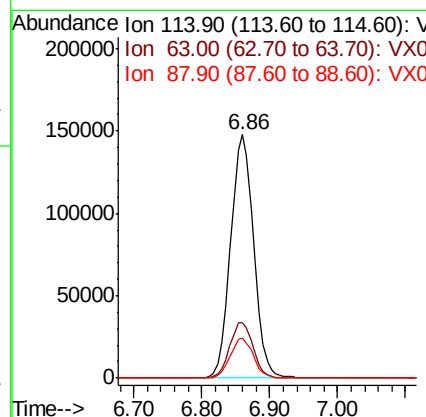
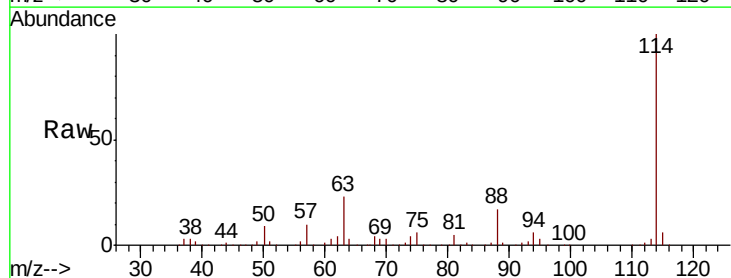
Instrument :  
 MSVOA\_X  
 ClientSampleId :

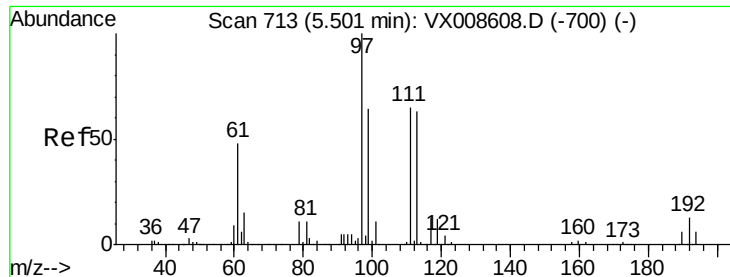
Tot Ion: 65 Resp: 143095  
 Ion Ratio Lower Upper  
 65 100  
 67 54.2 0.0 107.2



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.86 min Scan# 936  
 Delta R.T. -0.00 min  
 Lab File: VX008775.D  
 Acq: 09 Apr 2019 16:59

Tgt Ion: 114 Resp: 346559  
 Ion Ratio Lower Upper  
 114 100  
 63 23.0 0.0 47.2  
 88 16.6 0.0 34.0

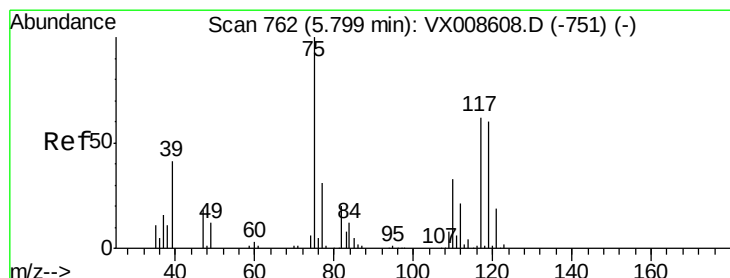
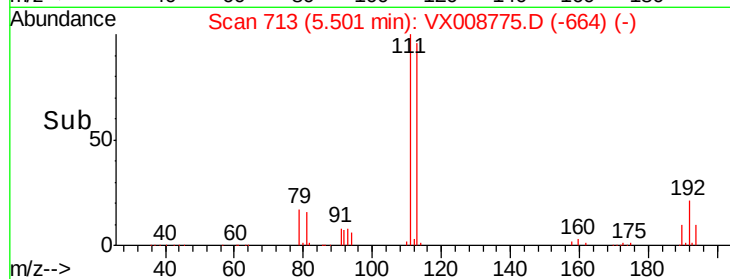
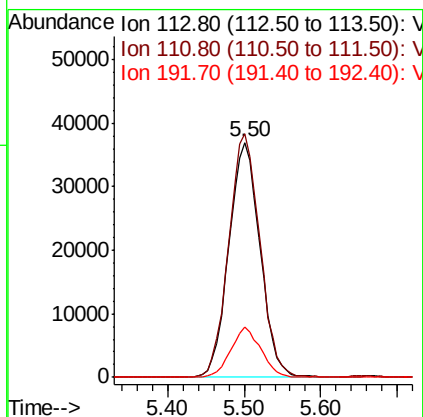
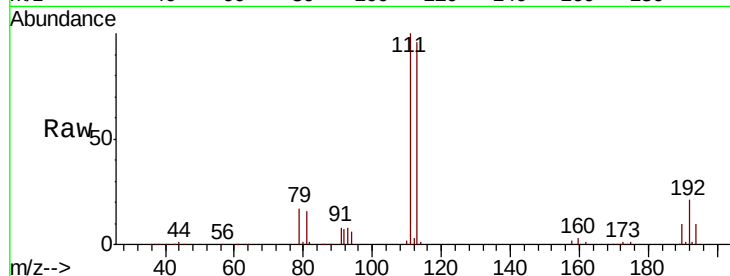




#35  
 Dibromofluoromethane  
 Concen: 47.067 ug/l  
 RT: 5.50 min Scan# 713  
 Delta R.T. -0.00 min  
 Lab File: VX008775.D  
 Acq: 09 Apr 2019 16:59

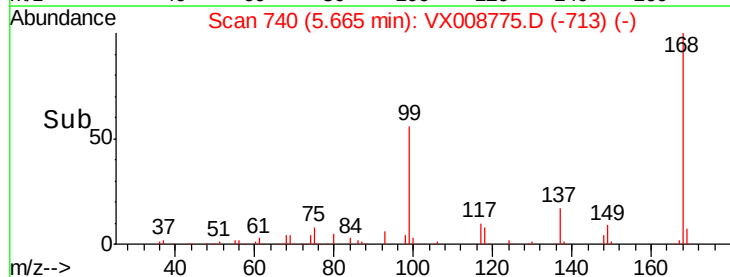
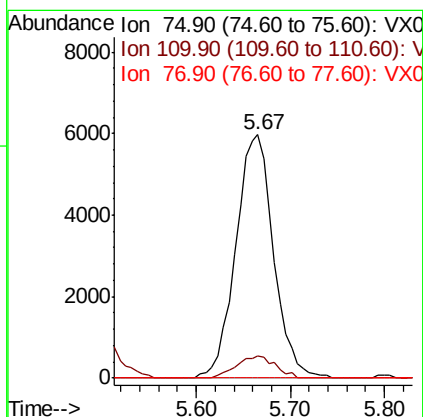
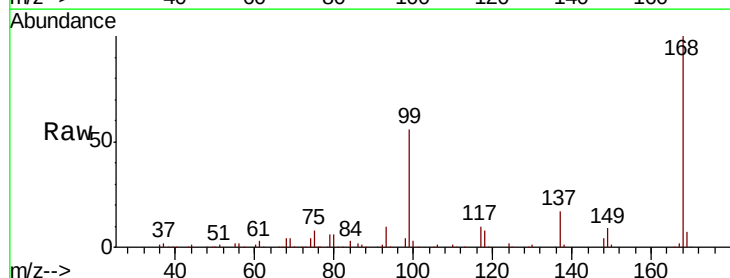
Instrument :  
 MSVOA\_X  
 ClientSampleId :

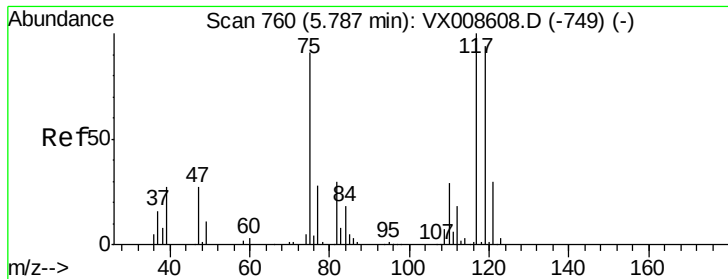
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 103.9 | 83.4  | 125.2 |
| 192     | 20.6  | 16.1  | 24.1  |



#36  
 1,1-Dichloropropene  
 Concen: 4.396 ug/l  
 RT: 5.67 min Scan# 740  
 Delta R.T. -0.13 min  
 Lab File: VX008775.D  
 Acq: 09 Apr 2019 16:59

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 9.4   | 16.4  | 49.2# |
| 77      | 0.0   | 24.7  | 37.1# |





#38

Carbon Tetrachloride

Concen: 6.424 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.12 min

Lab File: VX008775.D

Acq: 09 Apr 2019 16:59

Instrument :

MSVOA\_X

ClientSampleId :

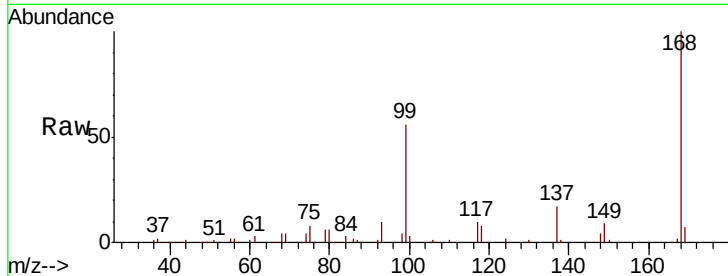
Tot Ion:117 Resp: 20142

Ion Ratio Lower Upper

117 100

119 4.1 75.0 112.6#

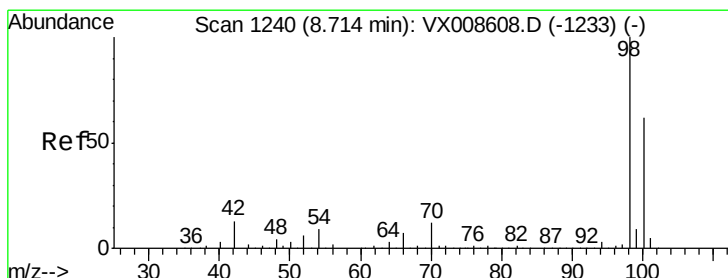
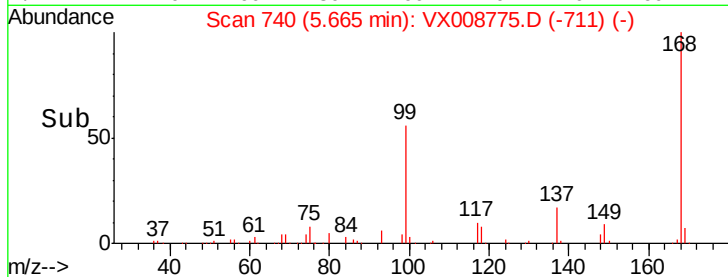
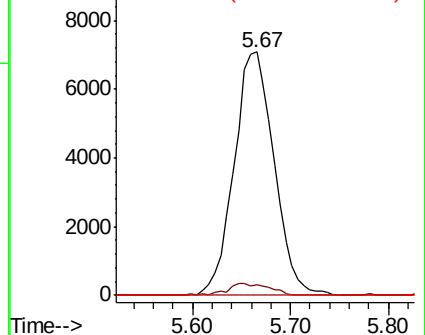
121 0.0 24.3 36.5#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#50

Toluene-d8

Concen: 48.563 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. -0.00 min

Lab File: VX008775.D

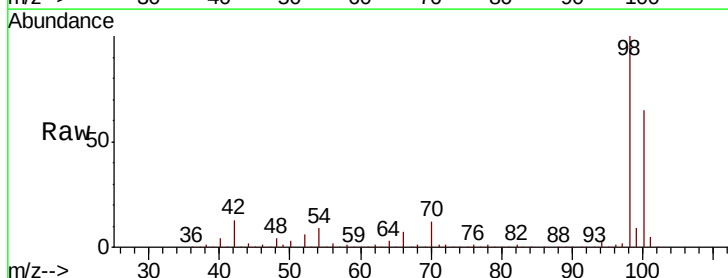
Acq: 09 Apr 2019 16:59

Tgt Ion: 98 Resp: 428455

Ion Ratio Lower Upper

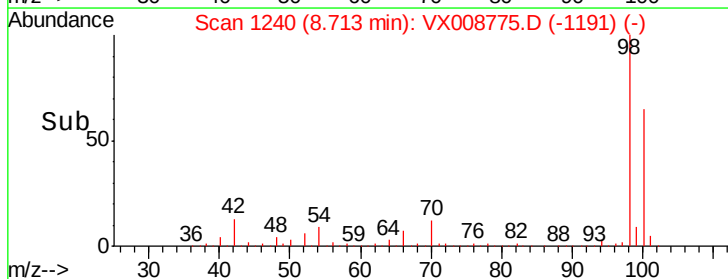
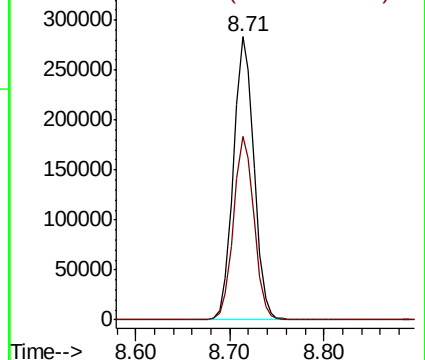
98 100

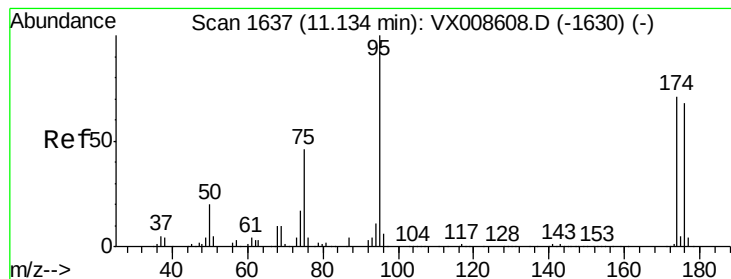
100 64.8 51.4 77.0



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V





#62

4-Bromofluorobenzene

Concen: 44.745 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.00 min

Lab File: VX008775.D

Acq: 09 Apr 2019 16:59

Instrument :

MSVOA\_X

ClientSampled :

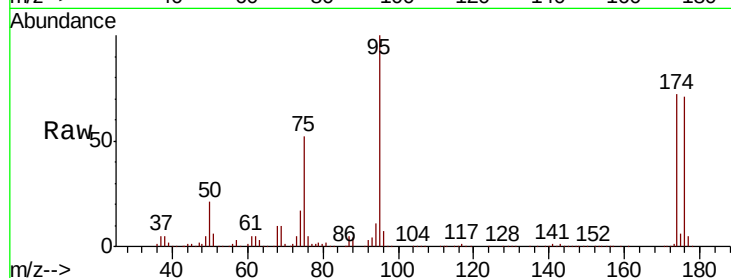
Tot Ion: 95 Resp: 139990

Ion Ratio Lower Upper

95 100

174 77.9 0.0 151.8

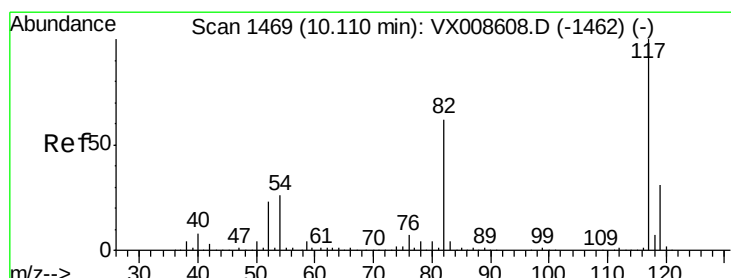
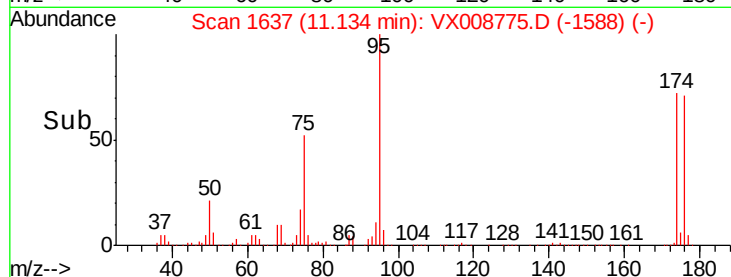
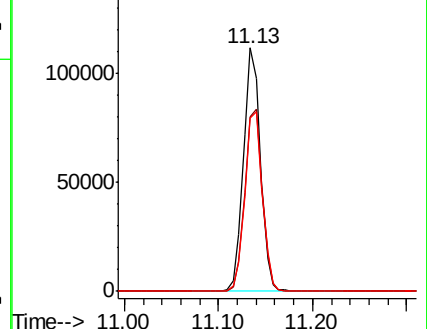
176 76.2 0.0 145.8



Abundance Ion 94.90 (94.60 to 95.60): VX008608.D (-1630) (-)

Ion 173.80 (173.50 to 174.50): VX008608.D (-1630) (-)

Ion 175.80 (175.50 to 176.50): VX008608.D (-1630) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1469

Delta R.T. -0.00 min

Lab File: VX008775.D

Acq: 09 Apr 2019 16:59

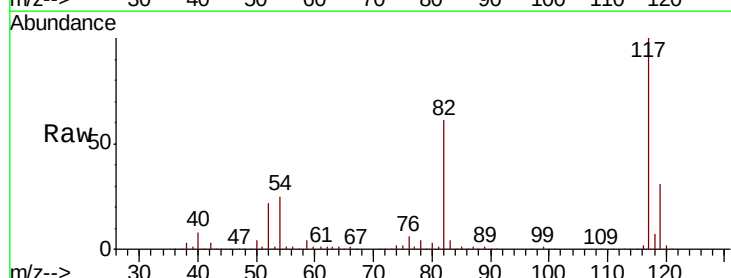
Tgt Ion: 117 Resp: 295233

Ion Ratio Lower Upper

117 100

82 60.5 49.6 74.4

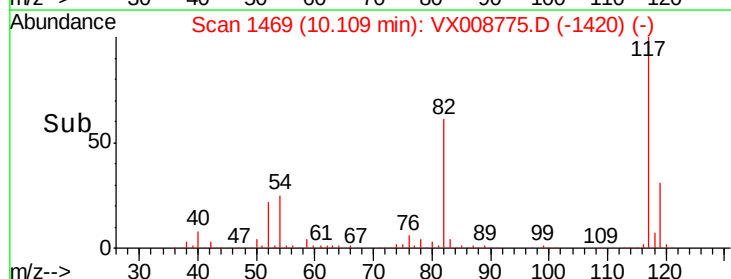
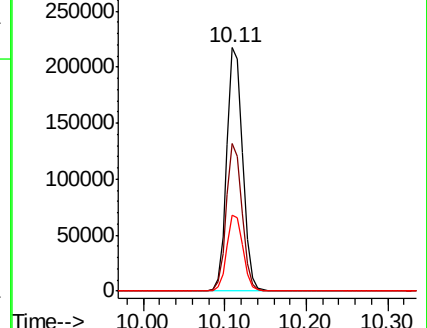
119 31.3 25.0 37.4

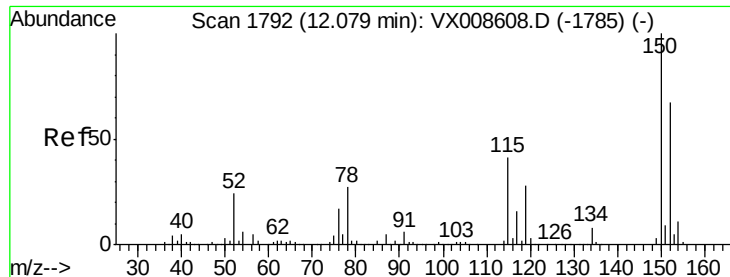


Abundance Ion 116.90 (116.60 to 117.60): VX008608.D (-1462) (-)

Ion 82.00 (81.70 to 82.70): VX008608.D (-1462) (-)

Ion 118.90 (118.60 to 119.60): VX008608.D (-1462) (-)





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. -0.00 min

Lab File: VX008775.D

Acq: 09 Apr 2019 16:59

Instrument :

MSVOA\_X

ClientSampled :

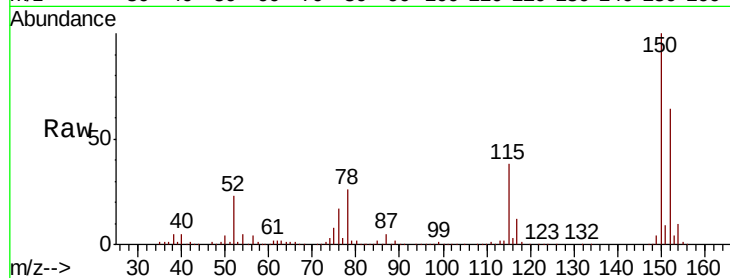
Tot Ion:152 Resp: 122171

Ion Ratio Lower Upper

152 100

115 59.5 43.5 130.5

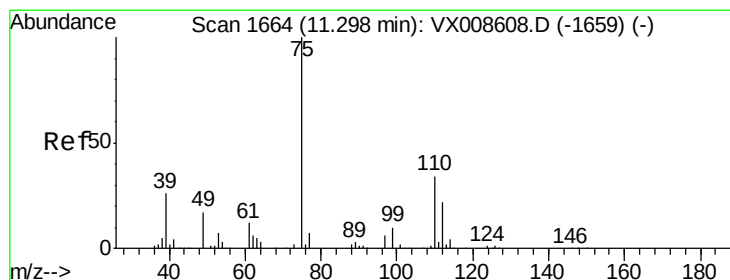
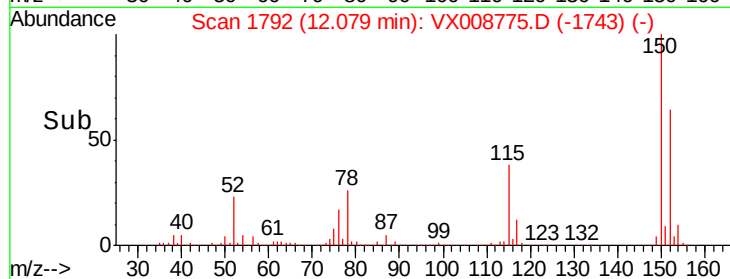
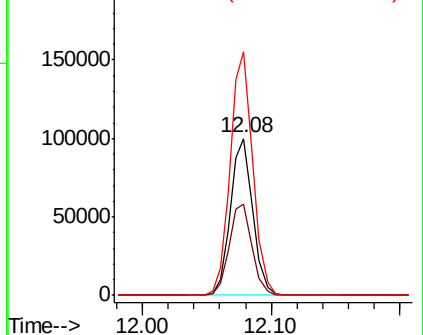
150 156.1 0.0 348.8



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 21.271 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX008775.D

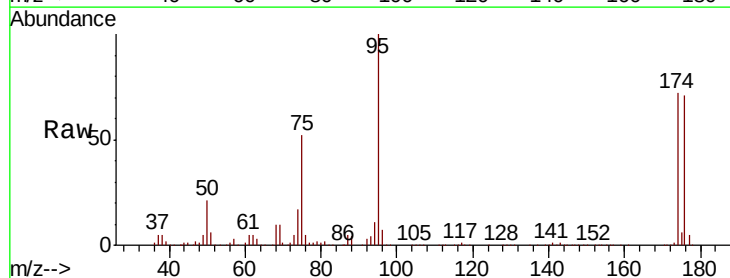
Acq: 09 Apr 2019 16:59

Tgt Ion: 75 Resp: 71390

Ion Ratio Lower Upper

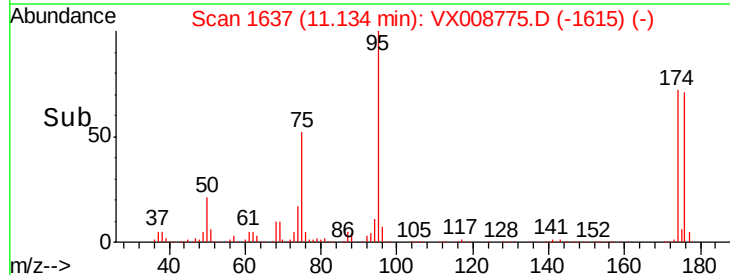
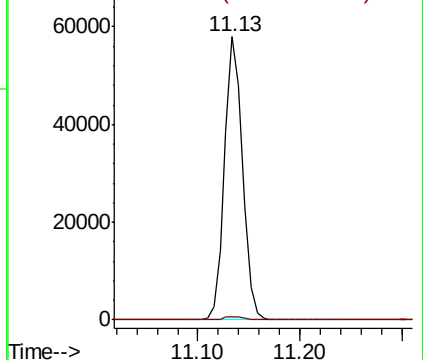
75 100

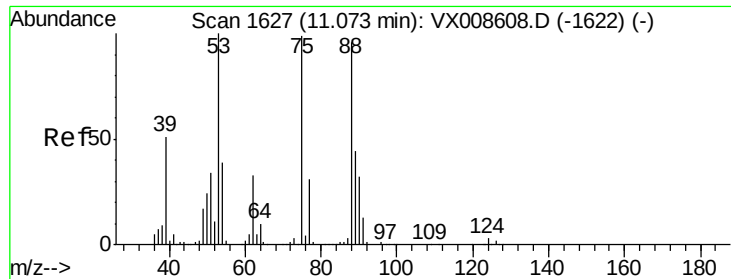
77 1.5 22.3 66.8#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0





#81

trans-1,4-Dichloro-2-butene

Concen: 58.636 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX008775.D

Acq: 09 Apr 2019 16:59

Instrument :

MSVOA\_X

ClientSampleId :

Tot Ion: 75 Resp: 71390

Ion Ratio Lower Upper

75 100

53 0.1 81.3 121.9#

89 0.0 35.6 53.4#

